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03/16/2004

Jian Lu

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EXAMINER

KRAUSE, JUSTIN MITCHELL

ART UNIT

PAPER NUMBER

3682

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/802,641 | LU ET AL. | |
| | Examiner | Art Unit | |
| | Justin Krause | 3682 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/16/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's election with traverse of Species 1 in the reply filed on September 28, 2006 is acknowledged. The traversal is on the ground(s) that the Examiner has not identified with specificity the claims, which the examiner has associated with species I and species II as required. This is not found persuasive because the MPEP does not require the examiner to identify the claims that are readable on the individual species. MPEP 809.02(a), as cited by applicant requires that particular limitations be pointed out, which the examiner has properly done. Species 1 discloses 5 slots. Species 2 discloses 6 slots. This subject matter is specifically claimed, for example in claim 26, which specifically claims 6 slots, and in claim 18, which claims 5 slots. Additionally, drawing figures is the preferred method of outlining species as recited in MPEP 809.02(a)(B):

Clearly identify each (or in aggravated cases at least exemplary ones) of the disclosed species, to which claims are to be restricted.

The species are preferably identified as the species of figures 1, 2, and 3 or the species of examples I, II, and III, respectively.

In the absence of distinct figures or examples to identify the several species, the mechanical means, the particular material, or other distinguishing characteristic of the species should be stated for each species identified. If the species cannot be conveniently identified, the claims may be grouped in accordance with the species to which they

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are restricted. Provide reasons why the species are independent or distinct.

The examiner has made clear the two species set forth in the restriction in the proper manner set forth in the MPEP by identifying the distinct figures and by providing claimed features, 5 slots or 6 slots, in support of the restriction.

This application contains claims directed to the following patentably distinct species:

Species 1: Figures 4 and 5

Species 2: Figure 7

The species are independent or distinct because Species 1 contains 5 slots, Species 6 contains 6 slots.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, Claims 1 and 17 appear to be generic.

The requirement is still deemed proper and is therefore made FINAL.

Applicant regards claims 1-29 as readable on the elected species.

Claim Objections

Claim 7 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper

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dependent form, or rewrite the claim(s) in independent form. The "axial plane is a Y axis axial plane" does not further limit the parent claim because the Y axis placement and orientation is arbitrary.

Claim 1 is objected to because of the following informalities: it is unclear if applicant regards the language of the preamble regarding the stud member, stud head, and housing to be positively claimed structure, or as part of the functional limitation "for use in a movable socket" in the preamble. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8, 12, 13, 20 and 26-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding 8 and 13, the recitation of "a first radial slot" and "a last radial slot" is indefinite because it is unclear if more slots are being added to the radial slots claimed in claim 1, or if the radial slots are being claimed. It is also unclear what applicant regards the "first radial slot" to be, and the "last radial slot" to be, the order the slots are arranged in or where the first one begins and the direction around the annulus one could count from first to last, if the slots were intended to be defined in any particular order.

Regarding claims 12 and 13, applicant appears to be using "length" and "radial depth" to define distances in the same direction, however the use of multiple terms renders unclear if this is the case, or if applicant intends that "length" and radial depth" define two different directions. Clarification and homologation of terminology defining the direction of the dimensions being claimed is recommended. Line 3 of claim 12 is also grammatically awkward, it is unclear what applicant intends to claim. Claim 13 adds further confusion when "unique length" and "radial depth" are both applied to the radial slot. It is unclear in what direction "length" is measured. Claim 13 is also grammatically awkward, rendering unclear what relationship applicant intends to claim.

It is unclear how applicant regards claims 26-29 as readable on the elected embodiment. Claim 20 requires a third radial slot in each of the two pairs of each axially opposed radial slots. If a third slot is added to each pair, an odd number of slots, namely 5, is impossible since three pairs is six slots. Further, since claim 18 requires one slot opposing the discontinuity, it appears as if applicant is claiming three pairs, plus the slot opposing the discontinuity for a total of seven, which is not disclosed anywhere within the application.

Claim 26 specifically requires the bearing insert to have six radial slots. Since applicant has elected an embodiment with five radial slots, it is unclear how the elected embodiment is readable on claims requiring six radial slots.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

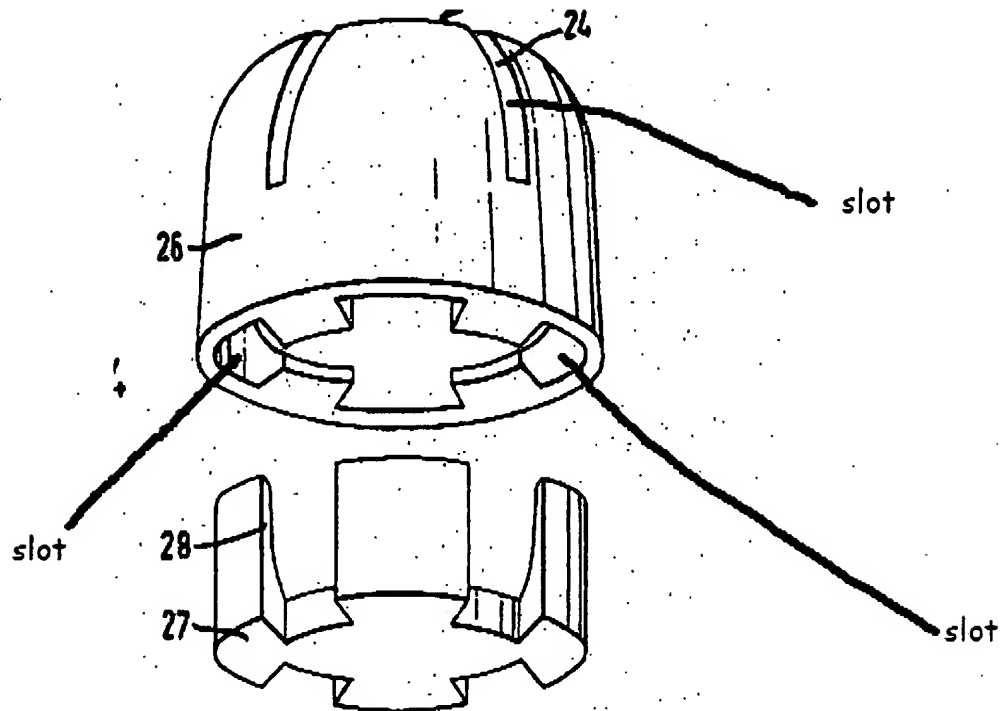
A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 17, and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Farrant (US Patent 4,372,621).

Farrant discloses a bearing with a stud member (13) with a stud head and a housing (11) with a central bore comprising:

An annular bearing body (26) that seats between the housing and the stud head, wherein the inner surface includes at least three radial slots (see fig below), two of said radial slots having a first radial depth which differs from a radial depth of each other radial slot.

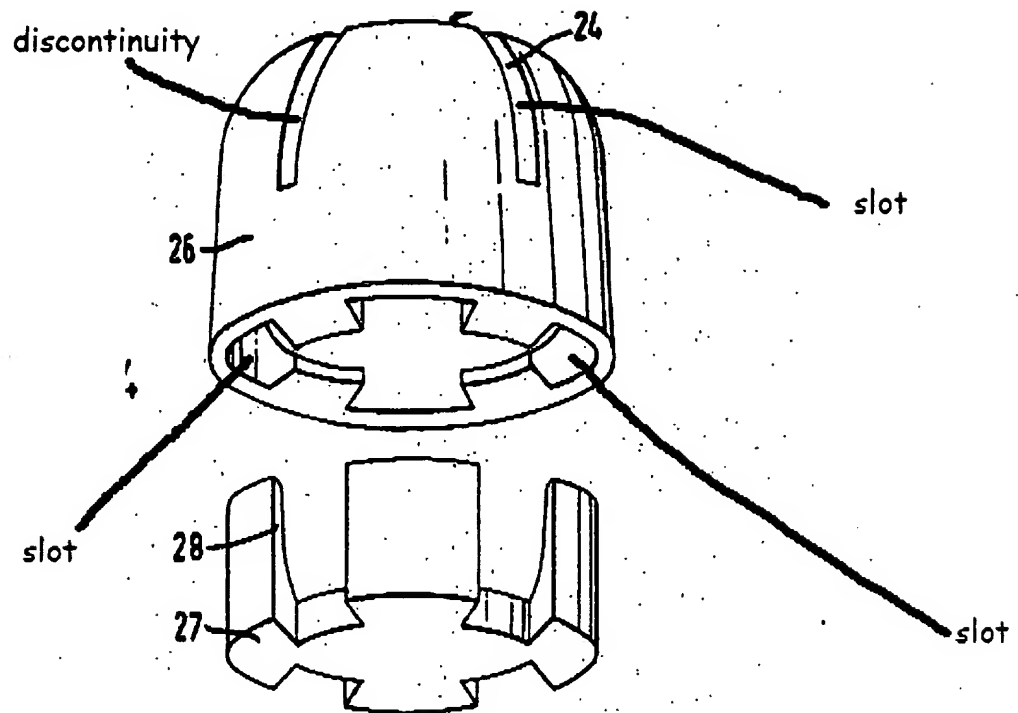


Regarding claim 2, the radial slots are symmetrically disposed about a vertical axis.

Regarding claim 3, the radial slot dimensions and placements are configured to minimize stresses.

Regarding claim 4, the radial slot dimensions and placements are configured to equalize stresses.

Regarding claim 5, the annular bearing body includes a discontinuity.



Regarding claim 6 and 7, an axial plane bisects the annular bearing into first and second mirror image portions.

Regarding claim 8, a radial depth associated with each radial slot in each of the first and second mirror image portions increases for each radial slot from a minimum radial depth in a first radial slot to a maximum radial depth in a last radial slot.

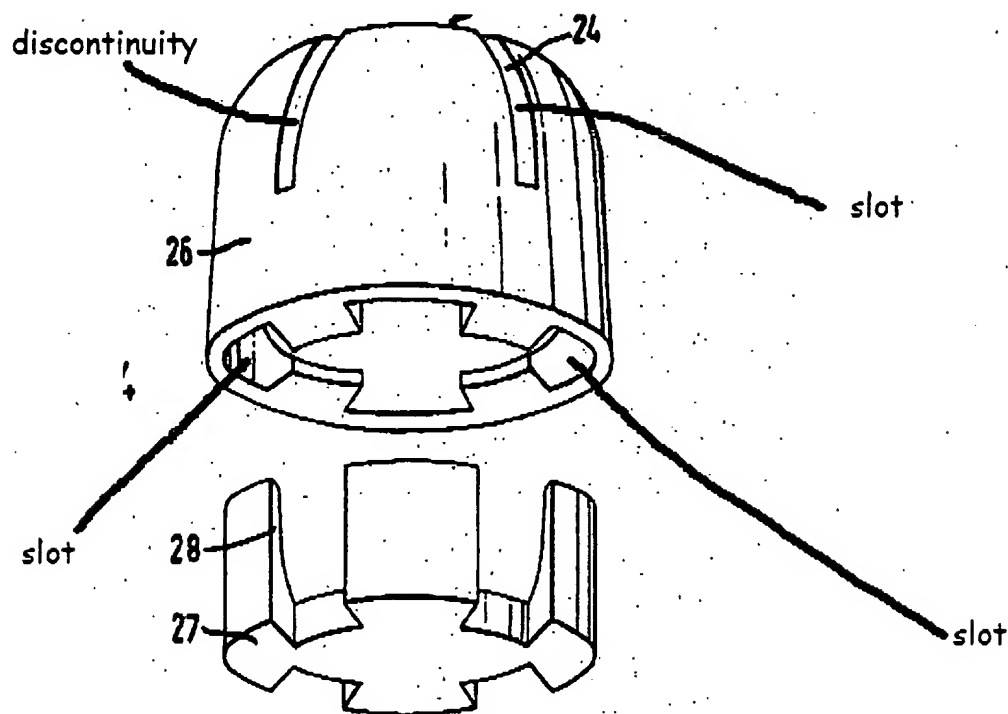
Regarding claim 17, Farrant discloses suspension joint comprising

A housing (11) for receiving a stud head

A bearing insert (26) disposed between the housing and the stud head, and including at least three radial slots and a discontinuity (see fig below), wherein

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each of the radial slots has a radial depth; and no more than two of the at least three radial slots have an identical radial depth.



Claims 1-4, and 6-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Strobl (US Patent 5,326,178).

Strobl discloses a bearing with a stud member (4) with a stud head and a housing (5) with a central bore comprising:

An annular bearing body (9) that seats between the housing and the stud head, wherein the inner surface includes at least three radial slots (11), two of said

radial slots having a first radial depth which differs from a radial depth of each other radial slot. (see figure 4, the slots separating regions 8 have a first radial depth and the slots separating regions 7 have a different radial depth)

Regarding claim 2, the radial slots are symmetrically disposed about a vertical axis.

Regarding claim 3, the radial slot dimensions and placements are configured to minimize stresses.

Regarding claim 4, the radial slot dimensions and placements are configured to equalize stresses.

Regarding claim 6 and 7, an axial plane bisects the annular bearing into first and second mirror image portions.

Regarding claim 8, a radial depth associated with each radial slot in each of the first and second mirror image portions increases for each radial slot from a minimum radial depth in a first radial slot to a maximum radial depth in a last radial slot.

Regarding claims 9-11, each of the radial slots has a reduced width neck portion and an enlarged end portion (16) which is circular in cross section and all of the enlarged end portions are identical (Col 5, line 27).

Regarding claim 12, as best understood, an axial plane bisects the annular bearing body into first and second mirror image portions and each of the reduced width neck portions for radial slots disposed in the mirror image portions has a unique length.

Regarding claim 13, as best understood, a unique length associated with each

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radial slot in a mirror image portion increases for each radial slot from a minimum radial depth in a first slot to a maximum radial depth in a last slot.

Regarding claims 14-16, the annular bearing body is secured in the housing against radial, rotational and axial movement.

Allowable Subject Matter

Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Krause whose telephone number is 571-272-3012. The examiner can normally be reached on Monday - Friday, 7:30-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMK

1/24/07


Thomas R. Hannon
Primary Examiner